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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,393	03/18/2005	Masanori Ogawa	2710/74074	4392

7590
Donald S Dowden
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1185 Avenue of the Americas
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10/16/2008

EXAMINER

DANIELS, MATTHEW J

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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10/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,393	Applicant(s) OGAWA ET AL.	
	Examiner MATTHEW J. DANIELS	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been transferred to Matthew J. Daniels.

Claim Objections

2. Claim 1 is objected to because of the following informalities: Claim 1, line 4 should be clarified because it states “making a mold referring said CAD data”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (EP 1110619) in view of Weaver (US 5,031,483). **As to Claim 1**, Ogawa teaches manufacturing a masking member by vacuum forming a sheet of plastic film in a mold of a desirable shape (see Paragraph [0086]) and subsequently trimming the masking member (see Paragraph [0090]).

Ogawa is silent to (a) the use of CAD data of the article having a prescribed section to be protected from coating to prepare the mold used to form the masking member, and (b) the masking member covering a section of an article to be protected from coating.

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However, these aspects of the invention would have been obvious for the following reasons:

(a) Weaver teaches use of a CAD/CAM program and a 4 or 5-axis cutting machine (6:1-46) to produce a mold which may be used for compression molding, stamping, and thermoforming (5:9-11) as well as vacuum forming (3:48-49). It is submitted that the claimed limitation is an intended use, and that the combination of Weaver and Ogawa would have met the intended use. The CAD data used to shape the mold would provide a contour which could have been used as an article, such as the resulting mold itself. In this view, where the mold is an article and a material is shaped in the mold, it provides a mask.

(b) This limitation is drawn to an intended use which the article of Ogawa would inherently meet since it could be used as a masking member for covering a section of an article to be protected from coating. Note that a step of coating is not claimed, and therefore it is submitted that the Ogawa article is inherently capable of performing the claimed intended use.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Weaver into that of Ogawa because (a) Ogawa suggests a mold for vacuum forming and Weaver provides a method suitable for manufacturing the mold suggested by Ogawa, or (b) Weaver provides a known and conventional means for fabricating a vacuum forming or thermoforming mold, and one of ordinary skill in the art would have viewed the mold fabrication technique as a substitute for the method disclosed by Ogawa.

As to Claim 2, Ogawa suggests the same intended use (Figs. 39-43).

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4. **Claims 3-5, 8, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (EP 1110619) in view of Weaver (US 5,031,483), and further in view of Blaimschein (US 5,168,787). Ogawa and Weaver teach the subject matter of Claim 1 above under 35 USC 103(a). **As to Claim 3**, Ogawa is silent to the robot trimmer using the position data obtained from the CAD data. However, Blaimschein teaches use of a robot to trim an article (3:32-4:6), and it would have been obvious to use the CAD data in the trimming process in order to provide a part of the desired shape. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Blaimschein into that of Ogawa because one would have recognized that the molding operations of Ogawa and Weaver would contain extra material as waste, and one would have been motivated to incorporate the Blaimschein process into that of Ogawa and Weaver in order to eliminate excess material and provide an article of the desired size and shape. **As to Claims 4, 5, 8, and 9**, Blaimschein also teaches fixing the article to a jig and trimming on a jig having a shape corresponding to the desired article (Figure, item 2), fixing the article to the jig by suction (Figure, item 6), and trimming with an ultrasonic vibration knife or water jet cutter (3:32-4:6, 1:25-35). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate these aspects of the invention into the process of Ogawa and Weaver since they are disclosed by Blaimschein as conventional trimming techniques for articles having a shape.

5. **Claims 6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (EP 1110619) in view of Weaver (US 5,031,483), Blaimschein (US 5,168,787), and further in view of Buchler (US 4,695,210). Ogawa, Weaver, and Blaimschein teach the subject matter of

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Claim 4 above under 35 USC 103(a). **As to Claims 6 and 7**, Blaimschein teaches above that it is known to fix an article to a cutting jig using vacuum. While Ogawa, Weaver, and Blaimschein are silent to the magnetic holding and the adhesive tape, Buchler teaches that in a cutting operation, it is known to fixing an article to a jig using vacuum, magnetic force, or double sided adhesive tape (3:10-20). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Buchler into the modified process of Ogawa because (a) fixing of the article to the cutting jig would have the obvious and expected effect that it would improve the cutting accuracy by avoiding article movement during the cutting process, and (b) one having knowledge of the Blaimschein technique of vacuum holding above would have viewed magnetic holding and adhesive holding as recognized and substitutable alternatives to the vacuum holding.

Response to Arguments

6. Applicant's arguments filed 23 June 2008 have been fully considered but they are not persuasive. The arguments appear to be on the grounds that the mold used to manufacture the masking member to protect the prescribed section from coating is made referring CAD data of an article having that section. Applicant further argues that the masking member is produced using the CAD data relating to the design of the article for which the masking member is used. Applicant further argues that the claimed invention does not use gypsum and the calculated thermal contraction ratio after molding to the CAD data will enable the precise modification of the effect of the masking member's thermal contraction after molding, and such modification can be performed in a short time.

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7. These arguments are not persuasive because the claims are not commensurate with the arguments (i.e. gypsum and thermal contraction are absent from the claims). Additionally, it is noted that the CAD data presumably pertains to a contour of a surface, and it is submitted that it would not matter if this contour is a positive contour or a negative contour. In providing a mold according to the Weaver process taken in combination with Ogawa, one would have obviously provided molds having the shape of the article in order to mold masking parts since the article and the masking element must match at the end of the process in order to be assembled together. Thus, one would have been motivated to provide parts which fit together as suggested by Ogawa, and in doing so would have found it obvious to provide a mold which would provide the shape of the article. Notably, the mold of Weaver also becomes an “article” since any part molded on the mold would mask a portion of the mold and was created with the CAD data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. DANIELS whose telephone number is (571)272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew J. Daniels/

Primary Examiner, Art Unit 1791

10/14/08